



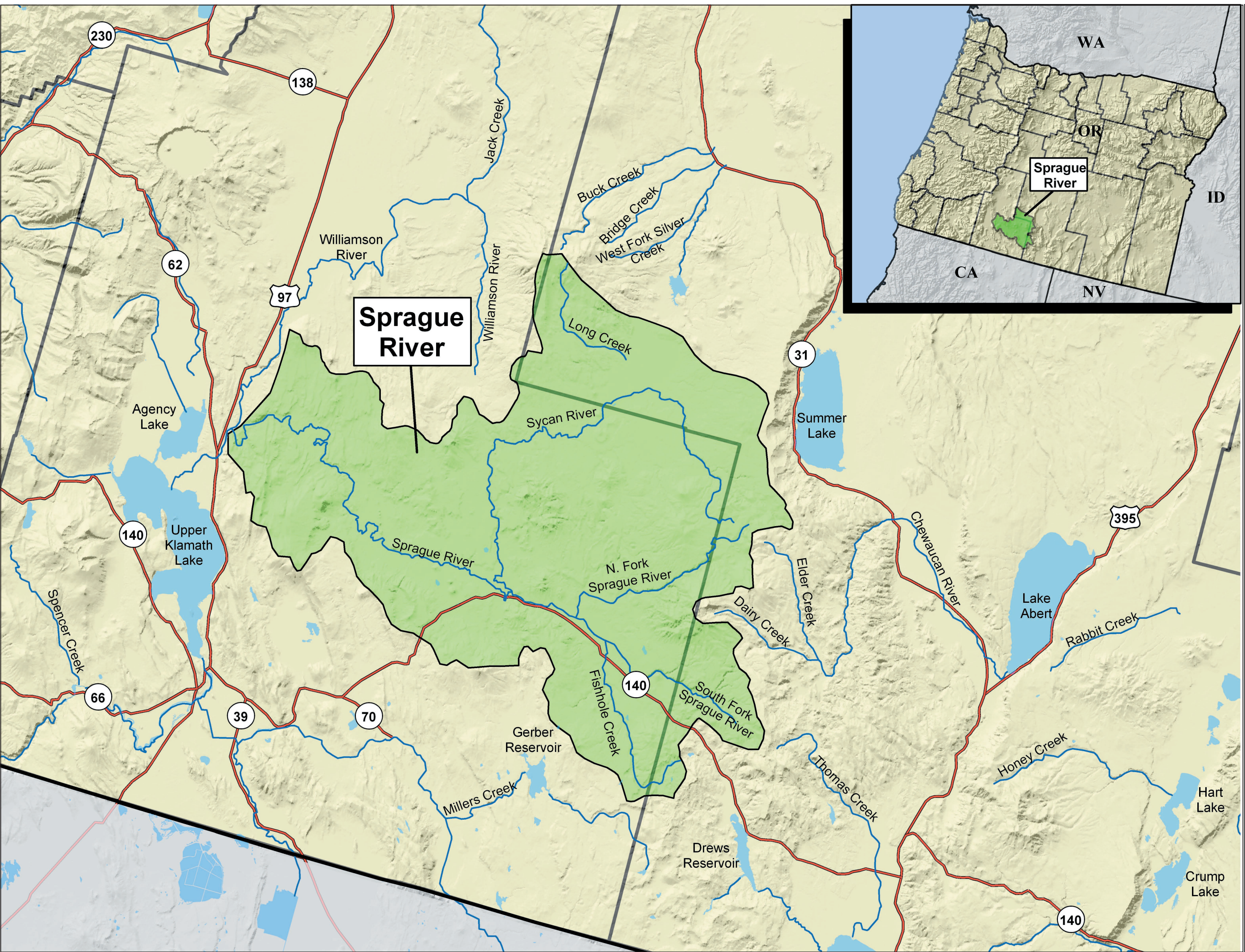
United States Department of Agriculture

Conservation Effects Assessment Project (CEAP)

Sprague River Watershed, Oregon: 2004-2007



An NRCS* Special Emphasis Watershed, one of 24 CEAP watershed projects.



Approach

Water sampling: Temperature, dissolved oxygen, pH

Watershed models: MIKE SHE, DHSVM (Distributed Hydrology Soil Vegetation Model), and AnnAGNPS (Annualized Agricultural Non-Point Source)

Assess practices: Irrigation water management, riparian/wetland restoration, and forest and range management

Communicating Results

Three annual progress reports planned. Project report will include 1) a detailed description of the hydro-climatology of the Sprague River basin as relevant to the understanding of the water balance and 2) recommendations on the technical capabilities of three hydrologic models (MIKE SHE, DHSVM, and AnnAGNPS) to assess the effects of conservation activities on the watershed's water budget.

Collaborators

- U.S. Geological Survey
- U.S. Fish and Wildlife Service
- U.S. Bureau of Land Management
- USDA, U.S. Forest Service
- Klamath Tribes
- Klamath Soil and Water Conservation District
- The Nature Conservancy
- Sprague River Watershed Council
- University of Washington, University of Oregon, and Oregon State University
- Local farmers and ranchers

Contacts

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CEAP Assessment

Evaluate effects of improving agricultural irrigation water management, restoring wetland/riparian areas, and conducting forest and range management on water quantity and quality.

Watershed Description

- 1 million acres
- 56% public lands, 24% private forest, 11% rangeland, 6% irrigated
- Upper Klamath Lake and several tributaries, including Sprague River, have been designated impaired water bodies by Oregon.
- Impaired water quality parameters: dissolved oxygen, temperature, pH, and chlorophyll A.
- Endangered & threatened species: bull trout, Lost River sucker, shortnose sucker

Issues: Water shortages, irrigation water demands, water quality, streambank erosion, fish and wildlife habitat (including endangered suckers and Coho salmon, and migratory birds).

*Natural Resources Conservation Service



Sprague River Valley in the summer time.



Riparian restoration.



Collecting hydro acoustic data on the Sprague River for Klamath tribes.

Timeline

2003 Initial funding	2004 August CEAP bibliographies	2005 May Wetlands peer review	July Wildlife literature review (program-based)	October Cropland literature review Wildlife literature review (practice-based) Wildlife Work Plan	November Wetlands Work Plan	December Draft findings—Prairie Pothole region
2006 February Preliminary habitat quality models— Prairie Potholes wetland region	March Preliminary National Assessment Report	2007 Fall National Assessment Final Report Special Emphasis Watershed reports				